

**MAR 20 2002****510(K) Summary**

K014175

Pursuant to 510 (i) of the Federal Food, Drug, and Cosmetic Act, as Amended.

Company Name: Sulzer Dental Inc.  
Address: 1900 Aston Avenue, Carlsbad, CA 92008-7308  
Telephone Number: 760-929-4300  
Registration Number : 2023141  
Contact Person: Sean Hariri  
Date Summary Prepared: December 19, 2001  
Classification Name: Endosseous Dental Implant  
Common/Usual Name: Abutment for Dental Implant System  
Device Trade Name: Sulzer Dental Ceramic System-HexLock

The device used for comparison in this summary is the HexLock Abutment (K953101) and the FRIALIT®-2 CeraBase Abutment (K980630)

**1. Intended Use:**

The Sulzer Dental Ceramic System-HexLock is intended for anterior single unit restoration cases.

**2. Description:**

The Ceramic System-HexLock uses a titanium hex core (abutment) and a ceramic coping. The core is attached to the implant with a titanium retaining screw. The coping is cemented to the core for a final restoration. The core will be offered in two implant interface diameters, 3.5mm, and 4.5mm. The Ceramic System coping is available in six shapes: small incisor, 17° small incisor, large incisor, 17° large incisor, canine, and premolar.

**3. Technological Characteristics:**

The Ceramic System-HexLock is an additional abutment design for Internal Hexagon implant systems. The system consists of two parts, the titanium alloy abutment and the ceramic coping. The abutment will be fixed to the implant with a titanium alloy screw. The ceramic coping will be bonded with porcelain by the laboratory to fabricate the finalized coping. The finished restoration is then cemented to the abutment.

**4. Comparison Analysis:**

The abutment of the Ceramic System-HexLock is similar to the Sulzer Dental HexLock abutment and the FRIALIT®-2 CeraBase Abutment. The ceramic coping of the Ceramic System is similar to commercial crowns used to fabricate a restoration. See **Table 1** below for a comparison of the Ceramic System and the predicate systems.

Feature	Sulzer Dental Ceramic System-HexLock	Predicate: Sulzer Dental HexLock Abutment	Predicate: FRIALIT-2® CeraBase Abutment
Intended Use	Anterior Single Unit Restoration Cases	Anterior/Posterior Single-Unit and Multi-Unit Restoration Cases	Anterior Single Unit Restoration Cases
Abutment Body Geometry	Tapered Retentive Wall	Straight Retentive Wall	Straight Retentive Wall
Abutment Diameters	4.5mm	3.5mm & 4.5mm	3.4mm, 3.8mm, 4.5mm, 5.5mm, & 6.5mm
Abutment/Implant Diameter	3.5mm & 4.5mm	3.5mm & 4.5mm	3.4mm, 3.8mm, 4.5mm, 5.5mm, & 6.5mm
Abutment Body Material	Titanium Alloy (Ti-6Al-4V)	Titanium Alloy (Ti-6Al-4V)	Pure Titanium grade II
Implant/Abutment Interface	Hex anti-rotational interface	Hex anti-rotational interface	Hex anti-rotational interface
Ceramic Coping Material	Zirconia Toughened Alumina	N/A	Aluminum Oxide
Manufacturing Site	Carlsbad, CA	Carlsbad, CA	Meinheim, Germany
Packaging	PETG tray and Tyvek® lid	Two Vial System	Blister pack combined w/ cardboard outer wrap.
Sterile	No	Yes	No

Table: 1 Summary of Comparison



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAR 20 2002

Mr. Sean Hariri  
Regulatory Affairs Associate  
Sulzer Dental, Incorporated  
1900 Aston Avenue  
Carlsbad, California 92008-7308

Re: K014175

Trade/Device Name: Sulzer Dental Ceramic System-Hexlock  
Regulation Number: 872.3640  
Regulation Name: Abutment For Dental Implant System  
Regulatory Class: III  
Product Code: NHA  
Dated: December 19, 2001  
Received: December 20, 2001

Dear Mr Hariri:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

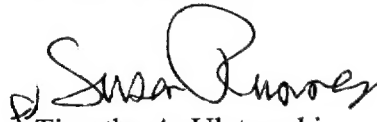
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies.

You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



Timothy A. Ulatowski

Director

Division of Dental, Infection Control  
and General Hospital Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(K) Number (if known): \_\_\_\_\_

Device Name: Sulzer Dental Ceramic System-HexLock

**Indications for Use:** The intended use of the Sulzer Dental Ceramic System-HexLock is for anterior single unit restoration cases. This system is intended to improve esthetics in anterior cases by replacing the metal substructure within a restoration with a tooth color ceramic structure.

(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use \_\_\_\_\_  
(Per 21 CFR 801.109)

OR

Over-The-Counter-Use \_\_\_\_\_

(Optional Format 1-2-96)

  
\_\_\_\_\_  
(Division Sign-Off)  
Division of Dental, Infection Control,  
and General Hospital Devices  
510(k) Number 1K014175